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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/070,071	06/27/2002	Alf Hammes	ZOU-1999DE507	7262

7590

10/03/2005

Richard S. Roberts  
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Princeton, NJ 08542

EXAMINER
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WHITE, EVERETT NMN

ART UNIT	PAPER NUMBER
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1623

DATE MAILED: 10/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/070,071

Applicant(s)

HAMMES, ALF

Examiner

Everett White

Art Unit

1623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8,10,11 and 19-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8,10,11 and 19-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                              | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)          | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. | 6) <input type="checkbox"/> Other: _____.                                   |

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### **DETAILED ACTION**

1. The amendment filed February 28, 2005 has been received, entered and carefully considered. The amendment affects the instant application accordingly:
  - (A) Claims 9 and 12-18 have been canceled;
  - (B) Claim 1 has been amended;
  - (C) Comments regarding Office Action have been provided drawn to:
    - (I) Duplicate claims, which has been withdrawn;
    - (II) 112, 2<sup>nd</sup> paragraph rejection, which has been withdrawn;
    - (III) 103(a) rejection, which has been maintained for the reasons of record.
2. Claims 1-8, 10, 11 and 19-21 are pending in the case.
3. The text of those sections of title 35, U. S. Code not included in this action can be found in a prior Office action.

### ***Claim Rejections - 35 USC § 103***

4. Claims 1-8, 10, 11 and 19-21 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Traill et al (US Patent No. 1,943,461) in view of Hilbig et al (US Patent No. 5,708,162) for the reasons disclosed on pages 3-5 of the Office Action mailed April 20, 2005.

Applicant's arguments filed July 18, 2005 have been fully considered but they are not persuasive. Applicants argue against the combination of the Traill et al patent in view of the Hilbig et al patent for the rejection of the claims on the ground that the disclosure of the Hilbig et al patent teaches away from using perborate, or any other oxidizing agent, in an acidic environment. This argument is not persuasive because the pH values of the reaction medium in the Hilbig et al patent ranges from 7 to 14, which include neutral medium. The neutral medium of the Hilbig et al patent embraces the medium of the instant claims since claim 1 set forth carrying out the depolymerization process in acidic and neutral medium. Applicants further argue that combination of the Traill et al patent in view of the Hilbig et al patent results with a two-step process in which the cellulose ether is depolymerized in an acidic environment and then further depolymerized by action of an oxidant, or vice versa. This argument is not persuasive since instant Claim 1 sets forth a wide time range when the oxidizing agent thereof is

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added to the slurry (or reaction medium), which include before, during and/or after the depolymerization or after the initialed addition of the acid to the reaction medium.

Arguments presented against the Hilbig et al patent or the Traill et al patent based on the references being used alone to reject the claims are noted. These arguments are not persuasive since the rejection of the claims are based on the combination of the Traill et al patent in view of the Hilbig et al patent.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, as set forth in the previously mailed Office Action, one of ordinary skill in this are would be motivated to combine the teachings of the Traill et al and Hilbig et al patents in a rejection of the claims under 35 U.S.C. 103 since both patents disclose procedures for depolymerizing or reducing cellulose ethers. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the process of using an acid to depolymerize cellulose ethers as suggested in the Traill et al patent with process steps that involve treating the cellulose ether with an oxidizing agent for depolymerization of cellulose ethers, in view of the recognition in the art, as evidenced by the Hilbig et al patent, that such a procedure result in polysaccharide ethers which can be employed in binders for improving adhesive power and film-forming properties. Accordingly the rejection of Claims 1-8, 10, 11 and 19-21 under 35 U.S.C. 103(a) as being unpatentable over the Traill et al patent in view of Hilbig et al patent is maintained for the reasons of record.

### **Summary**

5. Claims 1-8, 10, 11 and 19-21 are rejected. Claims 9 and 12-18 have been canceled.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Examiner's Telephone Number, Fax Number, and Other Information***

For 24 hour access to patent application information 7 days per week, or for filing applications, please visit our website at [www.uspto.gov](http://www.uspto.gov) and click on the button "Patent Electronic Business Center" for more information.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Everett White whose telephone number is (571) 272-0660. The examiner can normally be reached on Monday-Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James O. Wilson, can be reached on (571) 272-0661. The fax phone number for this Group is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-1600.

  
E. White

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James O. Wilson  
Supervisory Primary Examiner  
Technology Center 1600